

# Perceptions of the content and employability value of credentialed teaching certificates

Heather Kanuka<sup>a</sup> and Erika E. Smith<sup>b</sup>

<sup>a</sup>Educational Policy Studies, University of Alberta, Edmonton, Canada;

<sup>b</sup>Academic Development Centre, Mount Royal University, Calgary, Canada

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## Abstract

The purpose of this research was to gain a broader understanding of what department heads and doctoral students believe to be the value of credentialed teaching certificates. Using a survey methodology with participants ( $N= 450$ ), the study focused on the extent to which a credentialed teaching certificate provides a competitive advantage when seeking employment, as well as the content (pedagogical knowledge) that is perceived to be important for such programmes. Using a cross-sectional survey design, results highlight significant differences between doctoral students and department heads regarding the content and value of a credentialed teaching certificate in higher education.

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## Introduction

Professionalizing university teaching through postgraduate certificates has become commonplace in many universities. Ginns, Kitay, and Prosser (2008), for example, assert that such certificates are ‘increasingly important in raising the standard of university teaching around the world, usually placing an emphasis not merely on skill development, but also conceptual and attitudinal change’ (p. 183). Movement towards the professionalization of teaching has been underpinned by the assumption that teaching development leads to student-focused perspectives and, hence, a greater likelihood for effective teaching and learning practices (Parsons, Hill, Holland, & Willis, 2012). Jepsen, Varhegyi, and Edwards (2012) argue that while academics are well prepared for research in their doctoral programmes, opportunities to prepare them for teaching are often lacking. Additionally, with increasing demands imposed on graduate teaching assistants, there is a corresponding need to provide pedagogical training (Chadha, 2015), with some evidence of differences between academics who participate in pedagogical courses compared with those who do not (Postareff, Lindblom-Ylänne, & Nevgi, 2008). Gibbs and Coffey (2004) also report evidence of positive changes in academics who have participated in teacher training, noting a ‘contrasting lack of change, or negative changes, in untrained teachers’ (p. 88).

## Context

In Canada, there are no national or provincial frameworks for certification of higher education teachers (Hunt, Wright, & Gordon, 2008). In an effort to prepare new academics to teach, many Canadian universities offer graduate students some form of instructional preparation. Programmes are usually provided in a voluntary format, often within a series of short workshops, though increasingly such programmes require submission of a teaching dossier in order to receive a transcript citation (Kenny, Watson, & Watton, 2014).

While an accredited teaching certificate may be somewhat onerous with respect to administration and associated costs and may be perceived as an over-regulation of teaching, these programmes can provide hiring committees with some assurance on what the candidate knows about teaching and learning. The alternative, non-formal teaching programmes provide little assurance that the participants have learned what was offered in the programme; indeed, in non-formal programmes, records may only reflect whether the programme participants attended the sessions – and sometimes even this may go undocumented. While the benefits may provide a seemingly straightforward justification for accredited teaching programmes, it is unclear whether

credentialed teaching programmes are valued as an asset in Canadian institutions of higher education.

### **Literature review**

One conclusion that can be made, based on an international review of the research, is that a key focus of teaching development programmes today is to foster learning-centred approaches. Studies have shown that knowing how to use learning-centred approaches effectively is associated with achievement of student outcomes (Parsons et al., 2012), though different types of teaching programmes have differential impacts. Intensive and sustained accredited teaching programmes have been shown to result in an increase in pedagogic confidence, reflective practice, complex understandings of teaching and learning, cross-institutional dialogue, as well as awareness of diverse teaching strategies, test construction, and student assessment (Butcher & Stoncel, 2012; Ginns et al., 2008; Rust, 2010; Smith, 2004; Veniger, 2016). Research by Trigwell, Prosser, and Waterhouse (1999), subsequently confirmed by Ho, Watkins, and Kelly (2001), has also revealed that instructors who know how to use learning-focused approaches can foster deep approaches to learning, demonstrating a relationship between approaches to teaching and approaches to learning. There is also evidence that students who participate in certificate programmes report having their needs met, viewing the time as a valuable investment; they further report that such efforts had a positive impact on their career advancement (Johnson, Yukselurk, & Top, 2014). Within the Canadian context, where teaching programmes are normally provided at the graduate level (Kenny et al., 2014), research has revealed that students have a greater sense of preparedness after completing a teaching certificate programme (Taylor, Schönwetter, Ellis, & Roberts, 2008).

Other research, however, has pointed to a lack of any ‘real evidence that graduate certificates have played any discernible part in raising the standards of teaching in higher education; in fact, there is no real evidence that those standards have increased at all’ (Onsman, 2011, p. 489). This point is noteworthy because an overview of the research on teaching programmes in the UK, which engages with claims that knowing how to effectively use learning-centred approaches is linked to achievement of student outcomes, also points to gaps in measuring such impacts, including reliance upon indirect data (e.g. self-assessments) (Parsons et al., 2012). Onsman further concludes that development in teaching is bound to take time, and ‘as yet we have no clear understanding of how much of any development as a teacher is due to training and how much is simply a function of experience’ (2011, p. 491). Within a Scandinavian context, Postareff’s (2007) findings on pedagogical training suggest that shifting conceptions of teaching as they relate to practice is a slow

process. In addition to accounting for the time necessary for changes to occur and the role of experience, recognizing the uniqueness of disciplinary context is also an important factor (Smith & Kanuka, in press).

While we acknowledge that research in Canada and elsewhere on teaching programmes is inconclusive with respect to overall impact, nonetheless credentialed teaching certification can provide formal recognition of what is taught as well as learned. However, given the uneven evidence in the research literature, the value of credentialed teaching programmes continues to be questioned (Onsman, 2011; Stes, De Maeyer, Gijbels, & Van Petegem, 2012). What remains unclear is whether there is merit in implementing credentialed teaching programmes at the graduate level; whether, if implemented, they would be valued as an employability asset in academia; and if so, what content should be covered in such programmes.

### Context

In Canada, graduate students can have opportunities to be employed as teaching assistants within undergraduate programmes and, as such, are often a targeted audience for teaching development programmes. PhDs are increasingly expected to have teaching experience in addition to research experience before entering the Canadian academic job market. Since teaching training is not standardized in Canada, graduate students may participate in teaching development activities before, during, or after their teaching assignments. Although the majority of those participating in Canadian teaching programmes are either masters or doctoral students (Kenny et al., 2014), most are preparing for the transition to full-time academic employment. Consequently, the doctoral level is often perceived as an ideal time to complete teaching programmes.

The need for this study arises from evidence suggesting faculty in Canada believe that if they had received formal pedagogical training they may have been able to avoid, or at least sidestep, the challenges typically experienced by new academics (Britnell et al., 2010). However, as noted, a problem with non-credentialed teaching programmes for graduate students in Canada is that there are few, if any, overarching frameworks or requirements for what is taught as well as learned and thus vast differences between programmes in the content covered – problems that might be reduced with credentialed certificates. Such issues have led to lingering questions about the value of teaching programmes and whether credentialed teaching certificates truly provide an advantage in the competitive climate of securing a tenure-track position.

The aim of this research was twofold: (1) to explore the perceived value of a credentialed teaching certificate for new academic hires, and (2) based on

issues related to differences in teaching programme content, to explore the pedagogical knowledge and skills that should be developed in such programmes. Using a web-based survey, we collected the perspectives of doctoral students who are the target audience of teaching certificates, as well as the department heads who chair academic hiring committees in Canadian research-focused universities.

## **Methodology and methods**

The study employed a cross-sectional survey methodology (Cohen, Manion, & Morrison, 2011). The survey was designed based on an analysis of the literature on teaching development programme content within university certificates. The literature demonstrates five consistent areas in which new academics do not feel prepared: teaching methods, assessment, large classes, learning theories, and course management (Arreola, 2007; Smith, Heubel, & Hansen, 2016). These areas informed the structure of the survey. To encourage an acceptable participation rate, the survey was limited to 10 questions, ensuring completion would not take more than five minutes. One question related to discipline, two items were on the value of a credentialed teaching certificate for interview selection for instructional and tenure-track academic positions, and eight questions focused on typical certificate content (see Table 1). Each question contained a closed Likert-style item followed by an open-ended comment box, and an open-ended comment box was also included at the close of the survey.

## **Sample**

Two sets of participants were targeted for this study: department heads ( $n= 322$ ), who also chair academic hiring committees, and doctoral students ( $n= 128$ ), who are the target audience for teaching certificates and typically seek academic employment. Both groups were identified at Canadian research-intensive universities using a convenience sample targeting participants meeting the inclusion criteria. For department heads, invitations to participate in the online survey were emailed to 600 participants at six Canadian research-focused universities, with a response rate of 54% ( $n= 322$ ). In order to allow current and recently completed doctoral students to participate in the survey, those who held or were transitioning to post-doctoral fellow roles were also included in the target doctoral audience (for clarity, the term doctoral student is used for this group). The institutional ethics review board required that survey invitations be provided to the doctoral students at a Canadian research-intensive university via the Graduate Students' Association (GSA) to ensure

participation was voluntary. Survey invitations for doctoral students were therefore distributed via an email listserv by a university GSA member.

Table 1. Perceived value of teaching knowledge and skills

	Role	
	Mean (SD, <i>n</i> )	
	t-test values, Cohen's <i>d</i> , <i>p</i> value	
	Department Heads	Doctoral Students
Knowing how to develop a syllabus and/or course outline.	1.41 (0.60, 257) <i>t</i> (352) = 0.19, <i>d</i> = 0.04, <i>p</i> = 0.853	1.39 (0.55, 97)
*Knowing how to write learning outcomes.	1.80 (0.75, 253) <i>t</i> (348) = 2.28, <i>d</i> = 0.29, <i>p</i> = 0.023	1.60 (0.62, 97)
*Knowing how students learn (based on learning theories) in higher education.	1.89 (0.73, 255) <i>t</i> (349) = 2.12, <i>d</i> = 0.27, <i>p</i> = 0.035	1.71 (0.61, 96)
**Knowing how to design a course (e.g., design, develop, deliver, evaluate).	1.48 (0.62, 256) <i>t</i> (350) = 2.91, <i>d</i> = 0.36, <i>p</i> = 0.004	1.28 (0.48, 96)
*Knowing how to write a teaching philosophy for a dossier/portfolio.	2.04 (0.72, 254) <i>t</i> (349) = 2.76, <i>d</i> = 0.33, <i>p</i> = 0.006	1.80 (0.73, 97)
Knowing how to successfully facilitate large classes.	1.71 (0.67, 254) <i>t</i> (349) = 1.41, <i>d</i> = 0.17, <i>p</i> = 0.160	1.60 (0.62, 97)
***Knowing how to use diverse teaching methods (e.g., problem based learning, case based learning, collaborative and cooperative learning, facilitating discussions, small group work, etc.).	1.68 (0.66, 256) <i>t</i> (351) = 3.27, <i>d</i> = 0.40, <i>p</i> = 0.001	1.43 (0.59, 97)
Knowing how to use diverse assessment/evaluation methods (e.g., multiple choice exams, essays, grading rubrics, presentations, etc.).	1.66 (0.65, 255) <i>t</i> (350) = 0.52, <i>d</i> = 0.06, <i>p</i> = 0.607	1.62 (0.67, 97)

\*Differences significant at  $p < 0.05$ .

\*\* Differences significant at  $p < 0.005$ .

\*\*\* Differences significant at  $p = 0.001$ .

## Data analysis

Quantitative survey responses were analysed using descriptive and inferential statistical procedures via SPSS software. Questions with Likert-scales measured the following values: 1 (strongly agree), 2 (agree), 3 (disagree), and 4 (strongly disagree). Qualitative open-ended survey responses were analysed using generic qualitative coding techniques (Merriam, 2009). *t*-Tests were used to compare differences between the two groups' means, and effect sizes were calculated using Cohen's *d*, with 0–0.20 considered a weak effect, 0.21–0.50 as a modest effect, 0.51–1.00 as a moderate effect, and >1.00 constituting a strong effect (Cohen et al., 2011). Data analysis focused on observable differences, relationships, or themes demonstrated in participant views of the content and value of credentialed teaching certificates, with comparisons between department head and doctoral student groups.

## Results

Results from the survey demonstrate significant differences between department heads and doctoral students regarding the perceived value of attaining credentialed teaching certificates in higher education, with consistent differences between these groups regarding the value of such certificates for academic hiring, as well as for the content typically covered within such teaching development programmes. In the following sections, the quantitative data show where significant differences between these groups exist. The open-ended data provide further insights into why perceptions about the value of teaching certificates may differ.

### Quantitative survey results

The survey results indicate that department heads (86.0%,  $n= 258$ ) and doctoral students (90.9%,  $n= 100$ ) agreed or strongly agreed that a credentialed teaching certificate for an instructional (e.g. non-tenure-track lecturer or sessional) position has perceived value for interview selection, therefore providing a competitive advantage for academic employment. With respect to the value of a credentialed teaching certificate for a tenure-track position, 70.5% ( $n= 213$ ) of department heads and 83.0% ( $n= 93$ ) of doctoral students agreed or strongly agreed that it would positively influence interview selection.

However, when delving further into these results, a t-test demonstrated that doctoral students ( $n= 112$ ,  $M= 1.80$ ,  $SD = 0.76$ ) place significantly higher value than department heads ( $n= 302$ ,  $M= 2.21$ ,  $SD=0.79$ ) on a for-credit (formal, externally recognized) certificate in teaching from a respected university as positively influencing interview selection for a permanent, tenure-track position:  $t(412) = 4.75$ ,  $d = 0.53$ ,  $p < 0.001$ . A t-test also demonstrated that doctoral students ( $n= 110$ ,  $M= 1.54$ ,  $SD = 0.66$ ) place significantly higher value than department heads ( $n= 300$ ,  $M= 1.78$ ,  $SD = 0.76$ ) on a for-credit certificate in teaching as positively influencing interview selection for an instructional position (e.g. non-tenure-track lecturer, sessional):  $t(408) = 2.99$ ,  $d = 0.34$ ,  $p = 0.003$ . These results demonstrate that, overall, doctoral students place significantly higher value on teaching certificates than department heads as positively influencing interview selection, with a larger effect size for tenure-track hiring than for non-tenure track instructional hiring.

Consistent with their perceptions of the value of teaching certificates for academic hiring, as compared to department heads, doctoral students also gave higher ratings of teaching certificate content, indicating higher value for all variables tested, as shown in Table 1. More specifically, as compared to department heads, doctoral students place significantly higher value on several items that comprise teaching certificates, including: knowing how to write

course outcomes, how to write a teaching philosophy, and how students learn based on learning theories (differences significant at  $p < 0.05$ ); knowing how to design a course (differences significant at  $p < 0.005$ ); and knowing how to use diverse teaching methods (differences significant at  $p = 0.001$ ).

### Open-ended survey results

Open-ended survey responses reveal that department heads often diverged in their perceptions of teaching certificates, providing some insights into why department heads' Likert-ratings were lower overall for these items than doctoral students. A thematic breakdown of doctoral student perceptions about the content tended to be consistent. In contrast, department heads' open-ended survey comments demonstrated the ways in which their perceptions differed thematically, highlighting diverging views regarding the value for academic interview selection, and for developing teaching knowledge and skills through typical certificate content, such as writing course outcomes and teaching philosophies, designing a course, and using diverse teaching methods.

### Value for academic hiring

Consistent with their quantitative responses, many doctoral students' open-ended responses emphasized the value of a teaching certificate and its importance for developing good teaching skills. One doctoral participant noted:

I think if we want to see better teaching at our universities, then we need to start training teachers, not just researchers. Additionally, I think we need to begin to think about what we are teaching students outside of the content of the course – the ways we are teaching and the attitude we are modeling are also teaching students something.

This was reinforced by another doctoral participant who provided this comment: 'certification is necessary and long overdue'. While several doctoral students commented on their value, it is worth noting that some viewed such certificates as an additional burden:

The training now expected for one to become faculty is getting out of control. Often a 6 year phd followed by 4–6 years of postdocing and then a very slim chance at a faculty position. If I were told that a year or two-long teaching certificate were an additional requirement, I might lose my mind.

Both doctoral students and department heads reinforced the benefits and challenges of teaching certificates, though department heads outlined additional challenges and criticisms. Regarding the benefits, several department heads noted the value in recognition for formal training, including one participant who stated that ‘coming [from] the UK where I have seen the benefits of the compulsory training for university level teaching, I strongly support its introduction in Canada’. Another provided the following illustrative comment:

A number of recent candidates/hires have come with formal training in undergraduate instruction and course design. They stand out during the interview process, where we require a mock lecture to a second-year class in their area of expertise, as well as a standard research seminar.

Other department heads, however, did not see the value of a certificate, with one noting: ‘I have worked in Australia, Canada, and Hong Kong. People with teaching certificates often consider [them to be] busy work. In my experience they were not better teachers’.

Department heads noted several key challenges, with one articulating the need for teaching certificates to be nationally transferable, a challenge highlighted in the Canadian literature:

IF this were developed I would strongly recommend developing a nationally recognized certificate program that all of the [teaching] programs across the country support. It is unusual for a PhD student and post-doc to stay where they train so this MUST be something that is transferable and recognized by other universities.

Many department heads also raised concerns about credential creep and the additional burden of teaching certification on graduate students:

I could NOT with any sense of integrity ask graduate students to take on any more dept or additional course work given the current climate in which 1) tuition keeps rising; 2) there are limited opportunities for academic instructional positions, and 3) the competitive nature that focuses on research.

Other department heads reinforced this research focus in hiring: ‘For research stream faculty, the for-credit official course would not really be too important’. Finally, many department head comments emphasized that nothing replaces teaching experience. One participant, for example, stated that: ‘A certificate is a plus but, in any decision, actual teaching experience and results such as student evaluations would be far more important—by at least a factor of ten’.

Hence, while some participants perceived potential benefits in recognizing formal teaching development and training, numerous department heads

emphasized the importance of hands-on teaching experience and echoed doctoral student concerns that teaching certificates place an additional burden and reinforces credential creep on those hoping to be hired as an academic.

### Teaching certificate content

Doctoral student responses generally valued knowing how to write learning outcomes. As one stated: 'it is important I know how to outline these for students to know, what to expect and how I will assess their learning'. Alternatively, responses from department heads again diverged. Some department heads view this as essential knowledge: 'when we generate learning outcomes we get better structured courses, and students are more aware of the expectations' and it is 'important to understand the purpose of learning outcomes and how they can and should connect with course content, assignments, learning activities, and assessment'. Others view learning outcomes as 'useless' bureaucratic and administrative work, with one participant stating: 'understanding learning outcomes, sure, and thinking about them: but actually "writing" learning outcomes is a job for bureaucrats, not teachers'. Another department head noted that if learning outcomes are valued it is 'only because writing these, while useless, is now mandatory'. Likewise, conflicting department head views were also present regarding teaching philosophies, with one participant asserting: 'this is required for instructors when they go through the tenure process'. On this topic, another department head characterized these as 'full of platitudes and of little interest', with another concurring that teaching philosophies have 'not proved particularly helpful indicators of teaching ability or quality', and can even 'turn off' hiring committees.

Regarding the value of knowing how to design a course, one doctoral student stated: 'some profs instinctively understand how to do this or just have enough experience, but a well-designed course makes all the difference for students'. Some department heads agreed: 'knowing how to do this facilitates opportunities for creativity in doing something different or being willing to engage differently with students'. However, other department heads were unconvinced about course design being an important aspect of teaching preparation, with one stating 'it's not rocket science' and another noting that: 'even knowing this, you need to work with someone with experience, since there is a big gap between the theory and the implementation'. Another department head reinforced the importance of effective implementation and delivery: 'there are those who design and those who deliver it effectively', stating further that simply knowing the buzz-words does not 'make good teachers (in fact to the contrary make not so good teachers)!' Several other department heads noted the complexities surrounding course design where

several instructors are involved, with one saying: ‘partial agreement here, often more than four teachers will be involved in instruction’. Another participant agreed, explaining that: ‘this rarely happens’ because ‘usually more than [one instructor] is involved’, and pointing to the complicated nature of course design processes that often include, for instance, multiple instructors or wider curriculum committee processes.

Several doctoral students also valued knowing how to use diverse teaching methods, with one stating that it is ‘probably one, if not the most important skills’, and another noting: ‘important if you’re actually committed to understanding and responding to different learning styles’. Alternatively, several department heads placed disciplinary qualifiers on their agreement: ‘agree, provided the facilitator is an expert in the discipline taught’. Other department heads questioned whether this was practical, with one noting: ‘most use conventional lectures’, and another stating: ‘large class sizes make such innovations impractical’.

### Summary of results

The survey data demonstrate differences between doctoral students and department heads regarding the perceived value of teaching certificates for academic hiring, as well as with regard to the typical content within teaching certificates aimed at developing pedagogical knowledge and skills. While both groups provided overall agreement on the value of teaching certificates, delving into the quantitative results in more detail demonstrates that there are also significant differences, with doctoral students valuing teaching certificate content more highly, and valuing certificates significantly more highly for academic hiring. Participants’ open-ended comments provide some insights into why these differences exist, indicating that while both doctoral students and department heads acknowledge the benefits and challenges of teaching certificates, department heads are more divergent in their views, describing additional challenges and drawbacks. When compared to department heads, doctoral students also value particular content typically covered within teaching certificates more highly, including knowing how to write course outcomes and a teaching philosophy, how students learn based on learning theories, as well as how to design a course and how to use diverse teaching methods. Open-ended survey responses illustrate that department heads are divided regarding the perceived value of teaching certificate content, with many emphasizing the importance of bringing teaching theory into practice through experience.

## **Discussion and implications**

The findings of this study demonstrate significant differences between doctoral students' and department heads' perceptions about the value of a credentialed teaching certificate, providing additional insights while also reinforcing key findings from other recent research studies. These findings, for example, are consistent with Jepsen et al.'s (2012) research that found: 'for new academics, the findings show that research output was considered the most important selection [criterion] above teaching experience or teaching qualifications' (p. 629), also noting that there is not enough time in doctoral programmes to complete a teaching certificate. Pointing to continued tensions between teaching and research, this study's findings are congruent with Norton, Aiyegbayo, Harrington, Elander, and Reddy's (2010) study of new academics completing a postgraduate certificate in teaching and learning, which showed: 'the conflicting roles of research and teaching were also a major issue facing these new professionals' (p. 345). Furthermore, recent research shows that, contrary to prior assertions, faculty at research-intensive institutions are not less motivated to teach than faculty at teaching-intensive institutions (Stupinsky, BrckaLorenz, Yuhas, & Guay, 2018), a finding our results support with a majority of department chairs (>70%) in research-focused universities who value teaching certificates for tenure-track hiring.

In this study, both department heads and doctoral students raised concerns about the time required to complete a teaching programme as an additional burden. This too has been raised in prior literature as problematic. Onsman (2011), for example, argues that 'anything that requires as much time and commitment as a formal teaching qualification without providing immediate benefit may be seen as a hindrance to professional development' (p. 490). On the other hand, pivotal research by Boice (1992) shows that there is little evidence that participation in a teaching programme negatively impacts research productivity. Although participants in Boice's study initially resisted being in a teaching programme, after completion the participants reported benefits such as greater efficiency and a higher level of comfort in their teaching.

Our survey results show that certain components, such as how to write learning outcomes, draft a teaching philosophy, design a course, and use diverse teaching methods, are not generally perceived by department heads to be of greater importance than other components in a teaching programme: a significant difference when compared to doctoral student responses. Some department head responses emphasize the importance of teaching experience over theory and knowledge that is obtained through a credentialed teaching certificate. Again, this is a topic covered in the literature as well (e.g., Onsman, 2011; Smith et al., 2016). Yet, arguing that theory has no place in a teaching

programme seems difficult to defend. As with any discipline within the higher education sector, theory in education provides essential information on not only what a teacher is doing, but why education and learning happens. On this point, Knapper (2010) explains:

When faculty are largely ignorant of this scholarship [on learning theory], instructional practices and curriculum planning are dominated by tradition rather than research evidence. As a result, teaching remains largely didactic, assessment of student work is often trivial, and curricula are more likely to emphasize content coverage. (p. 229)

While dichotomous arguments are present in both research and professional contexts, connections between theory and practice are critical within and beyond teaching certificates (Hubball & Burt, 2006), and a deconstruction of the word pedagogy reminds us that both are important, as pedagogy is the art and science of teaching.

#### Limitations and future research

The impact of the costs associated with the administration, delivery, and evaluation of a credentialed teaching programme was not included in the survey. Currently, non-credentialed and voluntary teaching programmes at Canadian universities are most often offered at no cost to graduate students. In Canada, all credentialed programmes have tuition costs. Further research on who should bear the cost of a credentialed teaching programme is needed. A limitation of this study is that it focuses on participants from research-intensive universities; further qualitative, quantitative, and mixed methods research studies with additional sample sizes and types, and accounting for different higher education contexts, are needed.

Stupinsky et al.'s (2018) research indicates a connection between teaching motivations and self-determination theory, providing potential implications for academic identities related to roles (e.g. teaching or research focused) and institutional context that should be further investigated. Since other research demonstrates the importance of disciplinary identity (Smith & Kanuka, in press), as well as the influence of wider institutional activity systems for academic induction and personal/professional identity formation (Trowler & Knight, 2000), future research could examine how emerging versus established academic identities inform perceptions of teaching development, including certificates.

## Conclusion

This study examined whether department heads and doctoral students view credentialed teaching certificates as valuable. Based on survey data from participants (N= 450) at Canadian research-focused universities, findings show high agreement by both department heads and doctoral students on the value of a credentialed teaching certificate. However, doctoral students placed higher value on teaching certificates than department heads overall, especially with regard to tenure-track hiring and content related to course outcomes, teaching philosophies, learning theories, course design, and diverse teaching methods. Participant comments yielded insights into these differences, showing that while both doctoral students and department heads note the benefits and challenges of such certificates, department heads were more divided than doctoral students in their responses, emphasizing several additional challenges and drawbacks. These results illustrate significant differences between doctoral students and department heads regarding not only the content comprising teaching certificates but also the employment value of a credentialed teaching certificate.

This study's findings also emphasize a need for developing increased awareness about the importance of connecting educational theory and practice. Additionally, the survey data illustrate a need to ensure that graduate student audiences who are increasingly being targeted to undertake the commitment of completing a teaching certificate clearly understand that, while teaching certificate programmes may assist in improving pedagogical knowledge and skills, they may not provide a competitive advantage in securing a tenure-track position at Canadian research-focused institutions. To balance the benefits and drawbacks participants noted, the findings suggest a need to provide graduate students with realistic and evidence-informed expectations about teaching certificates and future hiring processes.

## Disclosure statement

No potential conflict of interest was reported by the authors.

## Notes on contributors

**Heather Kanuka** is a Professor in the Department of Educational Policy Studies, University of Alberta. Heather's research focuses on teaching, learning, and technologies in higher education. ORCID: <http://orcid.org/0000-0002-8266-5633>

**Erika E. Smith** is an Assistant Professor and Faculty Development Consultant in the Academic Development Centre at Mount Royal University

in Calgary, Canada. She holds a PhD in Adult, Community, and Higher Education from the University of Alberta. Erika's research interests include undergraduate digital literacies and social media use for learning, faculty development, and educational technologies. ORCID: <https://orcid.org/0000-0002-6649-9620>

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